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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.
09/162,821	09/29/98	ERICSON	R	4167-11

PM82/0925

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EXAMINER	
MCALLISTER,S	
ART UNIT	**PAPER NUMBER**
3652	

DATE MAILED: 09/25/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 09/162,821	Applicant(s) Ericson
	Examiner Steven B. McAllister	Group Art Unit 3652

☒ Responsive to communication(s) filed on *Sep 15, 2000* .

☒ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *2-28* is/are pending in the application.

Of the above, claim(s) *8-12, 15, and 22-26* is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *2-6, 13, 14, 16-20, 27, and 28* is/are rejected.

☒ Claim(s) *7 and 21* is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____ .

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____ .

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 2, 5, 6, 16, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gale, Sr. (1,132,769) in view of Tokyo Rope Mfg (JP 74020811).

Gale discloses a hoistway, elevator car C, counterweight 4, and drive motor at the base M, such the motor is coupled to the car and counterweight via a flat drive rope 11. Gale also discloses a suspension rope 3. Gale does not disclose that the suspension rope is a flat rope. The '811 reference discloses the use of a flat rope for suspension (see English abstract). It would have been obvious to one of ordinary skill in the art to modify the suspension rope of Gale by making it a flat rope as taught by '811 in order to make it more flexible and corrosion resistant.

As to claims 5, and 19, Gale discloses that the rope has a first end coupled to a counterweight (see Fig. 7), that the rope extends down from the first end, loops around the drive sheave 16, loops around a deflector sheave 18 and extends upward to the elevator where the second end terminates.

As to claims 6 and 20, it is noted that Gale discloses a tensioning mechanism comprising weight 12 and sheave 27.

3. Claims 3, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gale in view of the '811 patent as applied to claims 2 and 16 above, and further in view of Murtaugh (12,640).

Gale in view of '811 discloses all elements of the claim except a suspension rope coupled at its first and second ends to the upper portion of the hoistway. Murtaugh discloses such a configuration (see Fig. 1). It would have been obvious to one of ordinary skill in the art to further modify the elevator of Gale by using the suspension rope configuration of Murtaugh in order to effectively alter the length of the suspension rope in order to ensure the proper length.

As to claim 18, it is noted that Murtaugh discloses car sheaves f coupled to the car, the suspension rope having its first and second ends coupled to the upper portion of the hoistway (see Fig. 1) and engaging the sheaves.

4. Claims 13 , 14, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gale in view of Tokyo Rope Mfg (JP 74020811) as applied to claims 2 and 16 above, and further in view of Aulanko et al (WO 98/29326).

Gale in view of '811 discloses all elements of the claim except use of the ropes are made of non-metallic man-made fibers, or urethane. Aulanko et al disclose the use of these materials (page 2, lines 25-30). It would have been obvious to one of ordinary skill in the art to further

modify the apparatus of Gale by using the materials taught by Aulanko et al in order to facilitate the use of smaller sheaves and to eliminate the possibility of corrosion of ropes.

5. Claims 2-4, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murtaugh (12,640) in view of Gale (1,132,769) and Tokyo Rope Mfg (JP 74020811).

Murtaugh discloses a hoistway, an elevator car A, a suspension rope D coupled to the elevator car and counterweight B, and a drive rope C for moving the car along the suspension rope. Murtaugh does not show a drive motor with a drive sheave in the bottom portion of the hoistway engaging the drive rope or that the ropes are flat. Gale shows a drive sheave 16 with a drive motor M at the bottom of the hoistway engaging flat drive rope 11 (see Fig. 1). It would have been obvious to one of ordinary skill in the art to modify the drive system of Murtaugh by using the drive configuration of Gale to provide for less manual labor in raising and lowering the elevator. The '811 reference discloses the use of a flat rope for suspension (see English abstract). It would have been obvious to one of ordinary skill in the art to modify the suspension rope of Murtaugh by making it a flat rope as taught by '811 in order to make it more flexible and corrosion resistant.

As to claim 4, Murtaugh in view of Gale and '811 discloses an elevator sheave f, a deflector sheave coupled within the upper portion of the hoistway (g of Murtaugh), a counterweight sheave (g' of Murtaugh), and a suspension rope having its first and second ends coupled to the upper portion of the hoistway (see Fig. 1 of Murtaugh), the rope descending and

looping the car sheave, extending up and looping the deflector sheave and going down and looping around the counterweight sheave and rising to its second end. Murtaugh in view of Gale and '811 does not show the elevator sheave on the bottom of the car, however it is well known in the art to put the elevator sheave on the bottom of the car. It would have been obvious to one of ordinary skill in the art to do so in order to reduce the amount of space required above the elevator car at the top of the shaft.

Allowable Subject Matter

6. Claims 7 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments filed 9/15/00 have been fully considered but they have been not been found to be persuasive.

Applicant argues that the rejection of Gale in view of Tokyo Rope is not proper because the flat rope of Tokyo Rope is intended to be used as a compensation rope. While that use is disclosed in the reference, both the English abstract and the translation clearly disclose the use of the rope for hoisting (see page 2, third paragraph).

Next, applicant argues that the motivation for Gale in view of Tokyo Rope and further in view of Murtaugh is absurd. The examiner notes that one of ordinary skill in the art would cut the rope to the proper length, but that with use the ropes stretch somewhat. The configuration of

Murtaugh, anchoring both ends in the top of the shaft, allows the stretching to be compensated for by adjusting an anchor point.

Next, applicant argues that the rejection of Gale in view of Tokyo Rope and further in view of Aulanko et al is not proper for the same reasons as discussed in the Gale in view of Tokyo Rope rejection. The examiner notes the above response.

In response to applicant's argument that the examiner's conclusion of obviousness in the rejection of Murtaugh in view of Gale and further in view of Tokyo Rope is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's argument that there is no suggestion to combine the references in the rejection of Murtaugh in view of Gale and further in view of Tokyo Rope, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 19880; *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, applicant is directed to the rejection for the relevant motivations.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. McAllister whose telephone number is (703) 308-7052.

Steven B. McAllister

September 21, 2000

9/25/00

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